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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,615	03/01/2004	Ian Charles Matthews	50N3215.01	8847

27774 7590 05/13/2008

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EXAMINER	
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ART UNIT	PAPER NUMBER
2621	
MAIL DATE	DELIVERY MODE
05/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/790,615	MATTHEWS ET AL.	
	Examiner	Art Unit	
	CHRISTOPHER ONUAKU	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14-16&19-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al (US 5,371,551) in view of Hiroi (US 2001/0022001) and further in view of Crinon (US 7,174,560).

Regarding claim 14, Logan et al disclose video and audio broadcast recording and playbacvk systems, including an arrangement for monitoring programming as it is broadcast and for enabling the listener or viewer to pause, replay and fast-forward the broadcast programming, comprising the method of:

a) converting an analog signal to a desired format (see Fig.1, col. 3, lines 60-67; here the input signal processors seen at 4B & 4C each comprise the cascaded combination of an RF tuner for selecting frequency channel and a compressor for converting the selected signal into compressed digital format);

b) converting a digital signal to the desired format (see Fig.1; col.3, line 67 to col.4, line 2; the input signal processor seen at 4D receives a video baseband signal which is simply compressed and supplied to the switching mode 3).

Logan clearly disclose a third signal (see Fig.1 and compressed digital HDTV signals received at the RF tuner as indicated at 4A; col.3, lines 60-63). However, Logan fails to explicitly disclose demultiplexing a third signal in a desired format, the third signal having an audio component and a video component.

Hiroi teaches broadcast communication systems, including broadcast data propagated in a digital television system, wherein received from a tuner is an incoming modulated DTVB signal propagated by a given carrier frequency arriving at a port 301. User 302 can select from a set of DTVB channels arriving at port 301 via input device 360 as delivered to tuner 305 over channel selector lead 361. The selected signal is fed to the demultiplexer 315 via demodulator 310. At the demultiplexer 315, the signal is split into its audio and video components (see Fig.3; paragraphs 0043-0045), here the received signal (claimed third signal) is split into a new format of its audio and video components. Demultiplexing a signal into a desired format by, for example, splitting the signal into its components provides the desirable advantage of facilitating the changing of a signal to a desired format by, for example, splitting the signal into its components. It would have been obvious to demultplex a signal into a desired format by, for example, splitting the signal into its components, as taught by Crinon, since this provides the desirable advantage of facilitating the changing of a signal to a desired format by, for example, splitting the signal into its components.

Logan and Hiroi fail to explicitly disclose multiplexing the first, second and third signals into a single transport stream.

Crinon teaches digital television, including a method and an apparatus for synchronizing events originating at a digital television receiver with instants of the audio, video or data elements of a digital television program, wherein in the transmitter 10, the elementary data streams for the video, audio program elements are compressed, formatted, packetized, and multiplexed into a single transport bit stream (see col.6, line 65 to col. 7, line 1). Also, in the program multiplexer 32, the several packetized elementary streams are multiplexed into s single transport bit steam (see col.7, lines 63-65). Packetizing each of the multiple signals and multiplexing the multiple signals into a single transport stream provides the desirable advantage packetizing the multiple signals and multiplexing the multiple signals into a single transport stream. It would have been obvious to further modify Logan by realizing Logan with the means to packetizie each of multitiple signals and multiplexing the multiple signals into a single transport stream, as taught by Crinon, since this provides the desirable advantage of packetizing the multiple signals and multiplexing the multiple signals into a single transport stream.

Regarding claim 15, Logan, Hiroi and Crinon fail to explicitly disclose the method comprising storing the single transport stream. Officail Notice is taken that is well known to store a single transport stream on a storage means. It would have been to further

modify Logan by adding a storage means at the proper location in Logan et al in order to store the single transport stream.

Regarding claim 16, Logan, Hiroi and Crinon fail to explicitly disclose buffering the first, second and third signals before the packetizing. However, the claimed buffering the first, second and third signals before the packetizing process would have been an obvious engineering design consideration depending on the circuit at hand.

Regarding claim 19, Logan discloses in Fig.1, col.3, lines 8-33, the switching node 3 wherein multiple different signals are routed to be switched to different devices. It would have been obvious to route an analog and a digital signal, for example, to a switching node, as shown by Logan, wherein the analog and digital signal would then be re-routed to one or more selected devices, in order to satisfy a user's desired design consideration.

Regarding claim 20, as discussed in claim 19 above, Logan discloses in Fig.1, col.3, lines 8-33, the switching node 3 wherein different signals are routed to be switched to different devices. It would have been obvious to route an analog, a digital signal, and a third signal for example, to a switching node, as shown by Logan, wherein any one of the analog signal, digital signal, and a third signal would then be selected and re-routed to one or more selected devices, in order to satisfy a user's desired design consideration.

Regarding claim 21, the claimed limitations of claim 21 are accommodated in the discussions of claim 14 above.

Regarding claim 22, Logan discloses a source interface having one or more input terminals to receive the plurality of signals of a plurality of different formats (see Fig.1, and the one or input signal processing units shown generally within the dotted rectangle 12; col.3, lines 8-24).

Regarding claim 23, the claimed limitations of claim 23 are accommodated in the discussions of claim 15 above.

Regarding claim 24, as discussed in claims 19&20 above, Logan discloses in Fig.1, col.3, lines 8-33, the switching node 3 to which different signals are routed to be switched to different devices. It would have been obvious to couple the source interface (see "source interface" 14), a demodulator, the first and second converters to the selector(a switch), wherein the selector would select which of the plurality of signals are sent (routed) to a multiplexer, and first and second converters, in order to satisfy a user's desired design consideration.

Regarding claim 25, Logan modified with Hiroi and Crinon, Logan discloses buffer memory 6 (see col.3, lines 8-24) and converter (s) 20/26 (see col.4, lines 14-31; and Crinon teaches packetizer 30 (see Fig.1, col.7, lines 49-62). In Fig.1 of Logan,

Logan discloses the principle of coupling given devices to satisfy a user's desired design. It, therefore, would have been obvious for a user to couple the claimed buffer, the first and second converters and the packetizer, for example, in order to satisfy a user's desired design consideration.

Claims 17,18,26&27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al , Hiroi, Crinon , and further in view of Bigham et al (US 5,740,075).

Regarding claim 17, Logan et al, Hiroi and Crinon fail to explicitly disclose the method wherein said converting the analog signal comprises: demodulating the analog signal; decoding the analog signal to a predetermined format; converting the analog signal in the predetermined format to a digital signal; and encoding the digital signal.

Bigham et al teach teach routing and access control in video distribution networks capable of providing subscribers with access to multiple information service providers for both interactive services and broadcast services, wherein converting the analog signal includes demodulating the analog signal (see analog demodulator; col. 29, lines 38-46); decoding the analog signal to a predetermined format (see analog decoder 2132) ; converting the analog signal in the predetermined format to a digital signal (see col.26, lines 31-46); and encoding the digital signal (see col.8, lines 32-41 and col.15, lines 41-67). Here Bigham teaches the desirable advantage of the different conversion modes of an analog signal, wherein the analog signal can be converted. It would have been obvious to further modify Logan et al by realizing Logan et al with the

means to advantageously convert the analog signal to different conversion modes, as taught by Bigham.

Regarding claim 18, Bigham further teaches the method wherein the desired format comprises an MPEG format (see col.15, lines 57-67).

Regarding claim 26, Logan modified with Hiroi, Crinon and Bigham, Bigham teaches converter, demodulator, decoder, and encoder (see claim 17 above) while Crinon teaches a packetizer (see claim 25 above). Further, in Fig.1 of Logan, Logan discloses the principle of coupling given devices to satisfy a user's desired design. It, therefore, would have been obvious for a user to design the claimed first converter which comprises a demodulator coupled to the decoder; an analog-to-digital converter coupled to the demodulator, and an encoder coupled between the analog-to-digital converter and the packetizer, for example, in order to satisfy a user's desired design consideration.

Regarding claim 27, Bigham further teaches wherein the encoder comprises an MPEG encoder (see Fig.3, encoder 1120; col.15, lines 57-67).

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bhatt (US 5,610,661) teaches a line scan converter system suitable for use with a high definition image signal.

Shimoda et al (US 5,394,249) teach a multisystem adaptable type signal processing and recording/reproducing apparatus capable of recording various types of input signals and obtaining output signals in various systems in a field of video tape recorders in which various types of recording/reproducing systems are standardized.

Kassatly (US 6,049,694) teaches multipoint video conference system and method including telecommunication systems.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Onuaku whose telephone number is 571-272-7379. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Onuaku/
Examiner, Art Unit 2621

/John W. Miller/
Supervisory Patent Examiner, Art Unit 2623